

Anti-IFNg Reference Antibody (emapalumab) Recombinant Antibody

Catalog # APR10560

Specification

Anti-IFNg Reference Antibody (emapalumab) - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW FC, E, FTA <u>P01579</u> Cynomolgus, Human Monoclonal IgG1 145.68 KDa

Anti-IFNg Reference Antibody (emapalumab) - Additional Information

Target/Specificity IFNg

Endotoxin < 0.001EU/ μg,determined by LAL method.

Conjugation Unconjugated

Expression system CHO Cell

Format

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

Anti-IFNg Reference Antibody (emapalumab) - Protein Information

Name IFNG

Function

Type II interferon produced by immune cells such as T-cells and NK cells that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed:16914093, PubMed:8666937). Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation (PubMed:8349687). Upon IFNG binding, IFNGR1 intracellular domain opens out to allow association of downstream signaling components JAK2, JAK1 and STAT1, leading to STAT1 activation, nuclear translocation and transcription of IFNG-regulated genes. Many of the induced genes are transcription factors such as IRF1 that are able to further drive regulation of a next wave of transcription (PubMed:16914093). Plays a role



in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits (PubMed:8666937). In turn, increases the quantity, quality, and repertoire of peptides for class I MHC loading (PubMed:8163024). Increases the efficiency of peptide generation also by inducing the expression of activator PA28 that associates with the proteasome and alters its proteolytic cleavage preference (PubMed:11112687). Up-regulates as well MHC II complexes on the cell surface by promoting expression of several key molecules such as cathepsins B/CTSB, H/CTSH, and L/CTSL (PubMed:7729559). Participates in the regulation of hematopoietic stem cells during development and under homeostatic conditions by affecting their development, quiescence, and differentiation (By similarity).

Cellular Location Secreted.

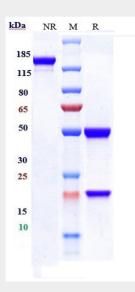
Tissue Location Released primarily from activated T lymphocytes.

Anti-IFNg Reference Antibody (emapalumab) - Protocols

Provided below are standard protocols that you may find useful for product applications.

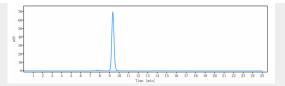
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-IFNg Reference Antibody (emapalumab) - Images



Anti-IFNg Reference Antibody (emapalumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%





The purity of Anti-IFNg Reference Antibody (emapalumab)is more than 99% ,determined by SEC-HPLC.